

Notice of Allowability

Application No.

10/507,487

Examiner

Ly T. TRAN

Applicant(s)

BRETON, ALEX

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/8/2005.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 9/13/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Prior Art cited

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Kurosawa (USPN 4,901,164) discloses a hand scanner type image comprising sensing the distance travel by the main body (abstract). However, Kurosawa does not disclose the present claimed invention.
 - Allen (EP 730366) discloses an image scanning system comprising a linear sensor (Abstract). However, Allen does not disclose the present claimed invention.

Allowable Subject Matter

2. Claims 1-23 are allowed.

The following is an examiner's statement of reasons for allowance:

- The primary reason for the allowance of claims 1-11 is the inclusion of the limitation of a sensor and print-head assembly comprised in a housing for a hand-held and hand-operated printing device controlled by a processor, comprising means for determining the x and y coordinates for at least one distal end of at least one row of printing means in the print head array, and the angle of rotation of said row with reference to a base line, made up of coordinates for the long side of an image stored to be printed, whereby

every dot of a part of an image to be printed having determinable corresponding x and y coordinates related to a determined position for the row; means for determining an x and y coordinate for a first tangent of the row with the first part of the image to be printed, and at least one second tangent for the image in relation to a mathematically defined configuration relating to the rotation angle of the row and the distal end, the second tangent making up a boundary for when a print out of the part image should take place; means for determining if the row during movement is closing in to the second tangent from the clockwise or counter clockwise direction; means for providing a print out decision for a subsequent part image to be printed through said print-head in front of a print out, if the row is closing in clockwise to the second tangent when using the upper distal end of the row as reference for the second tangent, and the vice versa when using the lower distal end as reference for a sweep.

- The primary reason for the allowance of claim 12 is the inclusion of the limitation of a method for a sensor and print-head assembly comprised in a housing for a handheld and hand operated printing device controlled by a processor, comprising predicting the positions of the array for subsequent moments in order to determine whether a text block or an image is about to be printed during the subsequent moments and if so deciding whether the complete text block or image, or a predefined part of the text block or the image will be covered by said array during said print

out sweep, based on said predictions, and if not, omitting a print out of said text block or image, or the part of the text block or image during the print out sweep, otherwise printing out said text block or image during the print out sweep.. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

- The primary reason for the allowance of claims 13-23 is the inclusion of the limitation of a method for a sensor and print-head assembly comprised in a housing for a hand-held and hand-operated printing device controlled by a processor comprising the steps of: determining the x and y coordinates for at least one distal end of at least one row of printing means in the print head array, and the angle of rotation of the row with reference to a base line, made up of coordinates for the long side of an image stored to be printed, whereby every dot of a part of an image to be printed having determinable corresponding x and y coordinates related to a determined position for the row; determining an x and y coordinate for a first tangent of said row with the first part of the image to be printed, and at least one second tangent for the image in relation to a mathematically defined configuration relating to the rotation angle of the row and the distal end, the second tangent making up a boundary for when a print out of the part image should take place; determining if the row during movement is closing in to the second tangent from the clockwise or counter clockwise

direction; and providing a print out decision for a subsequent part image to be printed through the print-head in front of a print out, if the row is closing in clockwise to the second tangent when using the upper distal end of the row as reference for reference for the second tangent, and the vice versa when using the lower distal end as reference for a sweep.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

May 10, 2006



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER